Time for a change

Time, change

1.1 Answer these questions.

1 Has your attitude to your free time changed since you were a child? (In what way?)

2 What value is there in teaching history to children?

3 What is the best way to learn about history?

4 Do you think older people are more interested in the past than children are? (Why? / Why not?)

5 What influence do you think the past has over the present?

1.2 Listen to two people answering the questions in 1.1. Which question are they answering?

Speaker 1 Speaker 2

1.3 COLLOCATION Now listen again and note the expressions connected with time. You may need to listen several times and/or read recording script 04 at the back of the book.

2.1 Do the words in the box refer to the past or the present?

retrospect contemporary bygone immediate preceding current topical status quo

2.2 COLLOCATION Complete the sentences with the words in the box in 2.1. Use a dictionary to help you and to check collocations with the words in bold. There may be more than one possible answer.

1 The exhibition contains faded photographs reminding us of a ____________ era.

2 He mixes ____________ ideas with those of years gone by.

3 There will always be people who resist change and want to maintain the ____________.

4 The ____________ effect of the war was a breakdown in law and order on the streets.

5 In ____________, and with the benefit of hindsight, it is clear that this was a bad decision.

6 I prefer this newspaper because it covers the most ____________ news stories.

7 On New Year’s Day, people often stop and reflect on all that happened in the ____________ year.

8 In previous years, the library was always very busy, but our ____________ students seem to prefer to study in the privacy of their own room.
3.1 05  Listen to a talk about archaeology and complete the summary using NO MORE THAN TWO WORDS for each answer.

Years before the arrival of our ancestors, who were the 1______________ of colonial times, ancient societies lived in the lake area. In some places, archaeologists have discovered the remains of 2______________ hidden under many layers of earth. But digs in other areas have only produced charcoal deposits from 3______________. Because of these finds, we can now protect the 4______________, e.g. they may be put on an official list of 5_______________. It is very important that they are kept safe. They are at risk of disappearing altogether because of erosion and looters. The looters take things from the area because they hope to sell them as 6_______________. The researchers plan to totally 7______________ the area and take away any 8______________ they find to put them in a safe place. If people steal from these areas, we lose the possibility of understanding more about our cultural heritage.

3.2 05  PARAPHRASE  Now listen again and note the words and phrases with a similar meaning to the words in italics in the summary.

4.1  The word change can collocate with all of the adjectives in the box. Do the adjectives mean large or small (change)?

enormous minute total dramatic modest complete immense gradual profound extraordinary sweeping minor tremendous infinitesimal moderate drastic slight major huge

4.2  The adjectives in the box can describe the nature or speed of change. Highlight or underline the synonyms of change in the sentences below. Then complete the sentences with adjectives from the box.

smooth gradual turbulent abrupt sudden rapid temporary

1 Everyone was grateful that there had been a very _______________ transition between governments.
2 The stock market crash led to a very _______________ reversal in fortunes for many people.
3 The government is hoping that this is only a _______________ shift in public opinion.
4 There was a _______________ improvement in our sales figures from 1990 to 2010, and this helped bring about our transformation from a small local company to a global leader.
5 This has been a _______________ period involving a great deal of struggle and hardship. But it is a necessary part of our evolution.
6 We are slowly witnessing a _______________ movement in favour of surveillance.
2 Time for a change

4.3 Look at the graph and find the following.

- A gradual increase
- A steady rise
- A slight fall
- A marked difference
- A temporary levelling out
- A very slight rise

4.4 Write the verb + adverb form of the phrases in 4.3.

- Increase gradually

4.5 Complete the description below with the words in the box.

periodic  period  temporarily  remained  and  steady  steadily  by  from  trend

The graph shows changes in the price of fresh fruits and vegetables, sugar and sweets, and carbonated drinks over a thirty-year 1___________ in the US between 1979 2___________ 2009. The graph also shows the general 3___________ in the consumer price index during this time.

While the consumer price index showed a slow and 4___________ increase from 1979 to 2009, the same cannot be said for the price of carbonated, or soft, drinks. After rising briefly between 1979 and 1981, they 5___________ fairly constant until 1999, when the price did begin to increase slowly.

In contrast, there was a marked difference in the price of fresh fruits and vegetables, which, despite 6___________ fluctuations, rose 7___________ throughout this period. In fact, fresh food prices only levelled out 8___________ between 1990 and 1992 and again 9___________ 2000 to 2001. However, 10___________ 2008 the price had increased by more than 300%.

4.6 Answer the questions. Try to use some of the new language from this unit in your answers.

1 Has your city or town changed over the past 20 years? (If so, in what way?)
2 What changes do you think we will see in the next 20 years?
3 Do you think our lives are changing too quickly?
4 How difficult is it for older people to adapt to new changes?
5 What changes would you like to see in the future?
6 How different is life today compared to when your grandparents were young?
In a museum laboratory, Irene Good is studying pieces of silk from long-lost cloth found at archaeological sites in western Europe and central and south Asia. Good immerses the threads in a solution to tease apart the strands of protein. Then she uses several methods of biochemical analysis to examine the proteins’ amino acids. What amino acids are present and the order they are in vary in different species of moths and therefore give a clue to the place where the silk was made.

‘What I love most is being able, not just to alter what’s known, but to improve access to the past based on very tiny pieces of evidence. Until recently, it was assumed that all [ancient] silk was from China,’ says Good, a specialist in fibre analysis and ancient-textile production and trade at Harvard University’s Peabody Museum. ‘Scholars held that any silk dating from 2400 to 700 B.C. was carried afar on trade routes from China. But our work is now calling that assumption into question.’ Her findings indicate that the ancient silk came not from domesticated Chinese silkworms but from species of wild moths native to western Europe and Asia. ‘Now it looks like some of the silk industry outside China was earlier than thought and more widespread,’ Good says.

Today, Good and other researchers are applying high-tech methods of chemical analysis to ancient textiles and fibres to glean unique clues about past civilisations. The results are shedding light on many aspects of daily life among early peoples. Much of the insight is coming from minuscule samples of textiles, which archaeologists categorise as ‘fibre perishables’. Until recently, these remains were usually overlooked because they were frayed, discoloured or too fragile to withstand the rigours of analysis.

‘Because textiles are organic, they’re subject to biological deterioration from air, water, minerals, insects and fungi. All kinds of things attack organic material and use it as their dinner,’ says Joseph Lambert of Northwestern University in Illinois. He is a pioneer in the use of analytical-chemical techniques for the study of archaeological materials.

Most cloth and other fibre goods degrade over time and eventually disappear. However, according to Lambert, in some cases ancient textiles survived well because they’d spent centuries in arid, freezing or low-oxygen environments, such as well-sealed tombs. Scientific interest in ancient textiles and other fibre objects is burgeoning. ‘Today, we’re finally combining archaeological background with training in [scientific] instrumentation to put it all together,’ says Lambert.

Chemical analysis and powerful microscopy can reveal remarkable characteristics of textiles: what plants and animals the fibres came from, how the yarns were made, what weaving techniques were employed and what dyes or pigments were used to colour them. Such information, combined with other evidence, enables researchers to infer the technological skills of ancient civilisations and the cultural importance of their textiles, notes Kathryn Jakes of Ohio State University in Columbus.

Among the fabric samples Jakes has analysed are carbonised scraps from Hopewell burial sites, which were typically earth mounds. Analyses have revealed decorative patterns indicating that at least some of the now-faded Hopewell-era textiles had been coloured. ‘The presence of colour reflects a significant level of technology, including knowledge of colourants in nature and of methods required to affix them to organic materials,’ says Jakes. She and her colleagues have conducted experiments to find out what combinations of plants and minerals the Hopewell groups may have used to produce various colours. Prehistoric people probably used plants like sumac and bedstraw as dyes, Jakes says, because caches of those seeds have been recovered from archaeological sites although the plants have no known dietary use. In one set of experiments, for example, the researchers made dye baths from sumac berries and bedstraw roots combined with different mineral fixatives. When the researchers tested the baths on fibres from milkweed plants and rabbit hair, only one combination – sumac, bedstraw, and potassium carbonate – produced a deep red that was colourfast.
Richard Evershed of the University of Bristol is another pioneer in the chemical analysis of organic archaeological materials. In the Sept. 16 issue of Nature, he and his colleagues describe their study of cloth wrappings from animal mummies of Ancient Egypt. The Egyptians preserved millions of mammals, birds and reptiles as votive offerings. Scholars had assumed that ancient people used relatively simple and inexpensive methods to prepare this multitude of animals for burial. Evershed’s findings call that assumption into question. His team analysed samples from cat, hawk and ibis mummies. The embalming substances turned out to include fairly exotic materials, such as oils, beeswax, sugar gum and tree resins and were as complex as those used for human mumification. Evershed suggests that the Ancient Egyptians had surprisingly sophisticated knowledge of how to use various preservatives.

The study of ancient textiles and other organic materials is a much-needed counterpoint to the traditional archaeological focus on objects made of stone, bone, metal and clay, says Penelope Drooker of the New York State Museum in Albany. Evidence from tools and weapons can lead to skewed interpretations of past life, she says. Until fairly recently in human history, Drooker points out, perishable goods comprised a large part of the materials of everyday life. At some archaeological sites in western North America, for example, an estimated 95 per cent of recovered artefacts were made of wood, bark, plant fibre, leather, fur or feathers.

As sophisticated techniques of analysis have revealed more detailed information about ancient textiles, scholars have been rethinking ideas about the early development of skills such as spinning and weaving. Fibre samples found in caves in France had convinced scientists that textile production first arose about 15,000 years ago. Now, some scholars assert that weaving and cloth making developed considerably earlier. After examining early representations of human clothing, Elizabeth Barber of Occidental College in Los Angeles concluded that textile weaving is at least 20,000 years old. A specialist in the Bronze Age and Neolithic cultures of the Aegean and southeast Europe, she has argued that fibre-making expertise was as revolutionary as the creation of equipment for working with stone and metal. Learning to twist plant and animal fibres into string-like yarns enabled prehistoric people to weave nets, baskets and other objects that eased the chores of everyday life, Barber explains in her extensive writings. As the tasks of providing food, clothing and shelter were divided between men and women in tribal societies, she says, women became the primary weavers because they could perform that activity while tending children.
Questions 7–13

Do the following statements agree with the claims of the writer in the Reading Passage?

Next to questions 7–13, write

**YES** if the statement agrees with the claims of the writer

**NO** if the statement contradicts the claims of the writer

**NOT GIVEN** if it is impossible to say what the writer thinks about this

7. Information about an insect can offer evidence about the origins of a piece of cloth.

8. Scientists have long realised the potential of ancient scraps of material.

9. According to Lambert, we can predict the amount of time that organic materials can last.

10. Joseph Lambert has led the way in research techniques of archaeological artefacts.

11. Jakes' experiments with dye were the first of this kind to be carried out.

12. Evershed's evidence supports the theory that Ancient Egyptians used a basic method to preserve mummies.

13. Researchers have used new data to question previous theories about the expertise of early people.

**Test tip**

Yes / No / Not given items are similar to True / False / Not given items. Both of them will be in the same order as the information in the passage. The only difference is that Yes / No / Not given items are based on the opinions of the writer and True / False / Not given items are based on facts within the passage. The most important thing to remember is that if the fact or opinion cannot be verified in the passage (as either True or False), then it is Not given.